

with Claims 11, 22, 23 and 25 to 45 having been withdrawn from consideration. Claims 1, 26, 36 and 46 are the independent claims. Reconsideration and further examination are respectfully requested.

Claim 46 has been rejected under 35 U.S.C. § 112, second paragraph. In response, Applicant has carefully reviewed and amended Claim 46 to attend to the issues raised in the Office Action. Accordingly, withdrawal of the § 112, second paragraph, rejection is respectfully requested.

Claims 7, 9, 18, 19 and 20 have been rejected under 35 U.S.C. § 112, first paragraph, for alleged failure to enable the feature of filling one material in the pore(s) above the electroconductive layer, and filling a different material in the pore(s) above the surface of the substrate where no electroconductive layer is formed. The rejection is respectfully traversed.

The test of enablement is whether one skilled in the art could make or use the invention from the disclosure coupled with information known in the art, without undue experimentation. See MPEP § 2164.01.

According to the present specification, after a desired material is filled in the pore(s) above the electroconductive layer(s), another material can be filled in the other pore(s) by infiltration, chemical vapor deposition (CVD) or the like. See page 25, lines 19 to 24. Applicants submit that one skilled in the art would recognize that any of the materials disclosed as being suitable for filling the pores(s) above the electroconductive layer(s) could be used to fill the pore(s) above the surface of the substrate where no electroconductive layer is formed. Further, one skilled in the art would know of other filling materials not explicitly discussed in the present specification.

In entering the § 112, first paragraph, rejection, the Office Action relies on *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). According to *In re Mayhew*, a feature which is taught as critical in the specification and is not recited in the claims should result in a lack of enablement rejection. See MPEP § 2164.08(c). Here, the reliance on *In re Mayhew* is misplaced, since Claim 7 recites the subject matter which, in the Office Action's view, is critical to the practice of the invention.

In view of the foregoing, Applicants submit that the subject matter of Claims 7, 9, 18, 19 and 20 is fully enabled, and reconsideration and withdrawal of the § 112, first paragraph, rejection are respectfully requested.

Claim 46 was rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,172,902 (Wegrowe); and Claims 1 to 10, 12 to 21 and 24 were rejected under 35 U.S.C. § 103(a) over JP 11-200090 (JP '090) in view of Wegrowe. Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention as recited by amended Claim 1 concerns a structure having pores which includes: a substrate; a plurality of electroconductive layers formed on surface of the substrate; a layer containing aluminum oxide covering the plurality of electroconductive layers and the surface of the substrate where no electroconductive layer is formed; and a plurality of pores formed in the layer containing aluminum oxide. The plurality of pores are disposed above the plurality of electroconductive layers and the surface of the substrate where no electroconductive layer is formed. A part of the layer containing aluminum oxide is provided under the plurality of pores. The layer containing aluminum oxide provided between the bottom of the pores disposed above the

electroconductive layer and the electroconductive layer contains a material forming the electroconductive layer.

The present invention as recited by amended Claim 46 concerns a structure having pores which includes: a substrate; a patterned electroconductive layer formed on a surface of the substrate; a layer containing aluminum oxide covering the electroconductive layer and a surface of the substrate where no electroconductive layer is formed; and a plurality of pores formed in the layer containing aluminum oxide. The plurality of pores are disposed above the electroconductive layer and the surface of the substrate where no electroconductive layer is formed. An electroconductive path is provided between the electroconductive layer and the bottom of the pores disposed above the electroconductive layer.

Thus, according to one feature of the invention, some of the plurality of pores are disposed above the surface of the substrate where no electroconductive layer is formed.

Wegrowe and JP '090, either singularly or in combination, are not seen to teach or suggest the foregoing feature.

As shown in Figures 4, 5A and 5B of Wegrowe, all of pores (1) are disposed entirely above an electroconductive layer (3a, 3b).

As shown in Figures 6(a), 7(a) and 7(b) of JP '090, all of pores (14) are disposed entirely above an electroconductive layer (11).

Applicants therefore conclude that the applied references fail to teach or disclose the present invention, and withdrawal of the § 102 and § 103 rejections is respectfully requested.

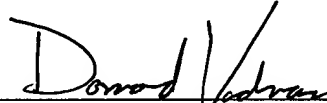
With regard to non-elected claims 11, 22, 23 and 25, Applicants advanced the argument in the Response To Election Of Species Requirement dated July 17, 2002 that at least Claims 1, 5, 12, 16 and 46 are generic claims. The Office Action did not reply to this argument. Accordingly, Applicants respectfully request an indication that Claims 1, 5, 12, 16 and 46 are generic claims, and upon the allowance of any of these claims, Applicants submit that they are entitled to the allowance of all claims directed to the species encompassed by those claims. See MPEP § 806.04(d).

With regard to non-elected Claims 26 to 46, Applicants respectfully request rejoinder of these claims under MPEP § 821.04.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Amended) A structure having pores comprising:
 - a substrate;
 - a plurality of electroconductive layers formed on a surface of the substrate;
 - a layer [primarily composed of] containing aluminum oxide covering the plurality of electroconductive layers and the surface of the substrate where no electroconductive layer is formed; and
 - a plurality of pores formed in the layer [primarily composed of] containing aluminum oxide;
 - wherein the plurality of pores are disposed above the plurality of electroconductive layers and the surface of the substrate where no electroconductive layer is formed, with a part of the layer [primarily composed of] containing aluminum oxide provided under the plurality of pores; and
 - wherein the layer [primarily composed of] containing aluminum oxide provided between the bottom of the pores disposed above the electroconductive layer and the electroconductive layer comprises a material forming the electroconductive layer.

12. (Amended) A structure having pores according to Claim 46, wherein a part of the layer [which is primarily composed of] containing aluminum oxide is provided under the plurality of pores, and wherein the layer [primarily composed of]

containing aluminum oxide provided between the electroconductive layer and the bottom of the pores disposed above the electroconductive layer comprises a material forming the electroconductive layer.

26. (Amended) A method for manufacturing a structure having pores comprising the steps of:

preparing a substrate;

forming a plurality of electroconductive layers each composed of at least one element selected from the group consisting of Ti, Zr, Hf, Nb, Ta, Mo, and W on a part of a surface of the substrate;

forming a film [primarily composed of] containing aluminum so as to cover the plurality of electroconductive layers and a surface of the substrate having no electroconductive layer thereon; and

anodizing the film [primarily composed of] containing aluminum so as to form a layer [primarily composed of] containing aluminum oxide having a plurality of pores;

wherein the plurality of pores is formed above the electroconductive layer and the surface of the substrate having no electroconductive layer thereon, and

wherein a material forming the electroconductive layer is diffused to a part of the layer [primarily composed of] containing aluminum oxide provided between the electroconductive layer and the bottom of the pores above the electroconductive layer.

29. (Amended) A method for manufacturing a structure having pores according to claim 26, wherein the electroconductive layer is an electroconductive film formed on the surface of the substrate, and the film [primarily composed of] containing aluminum is formed so that the thickness thereof is not less than two times the thickness of the electroconductive layer.

30. (Amended) A method for manufacturing a structure having pores according to claim 26, wherein the electroconductive layer is an electroconductive film formed on the surface of the substrate, and the film [primarily composed of] containing aluminum is formed so that the thickness thereof is not less than five times the thickness of the electroconductive layer.

31. (Amended) A method for manufacturing a structure having pores according to claim 26, wherein the electroconductive layer is an electroconductive film formed on the surface of the substrate, and the film [primarily composed of] containing aluminum is formed so that the thickness thereof is not less than ten times the thickness of the electroconductive layer.

33. (Amended) A method for manufacturing a structure having pores according to claim 26, further comprising a step, prior to the anodizing step, of forming a recess on a surface of the film [primarily composed of] containing aluminum disposed so

as to cover the plurality of electroconductive layers and the surface of the substrate having no electroconductive layer thereon.

36. (Amended) A method for manufacturing a structure having pores comprising the steps of:

preparing a substrate;

forming a patterned electroconductive layer composed of at least one element selected from the group consisting of Ti, Zr, Hf, Nb, Ta, Mo, and W on a part of a surface of the substrate;

forming a film [primarily composed of] containing aluminum so as to cover the electroconductive layer and a surface of the substrate having no electroconductive layer thereon; and

anodizing the film [primarily composed of] containing aluminum so as to form a layer [primarily composed of] containing aluminum oxide having a plurality of pores;

wherein the plurality of pores is formed above the electroconductive layer and the surface of the substrate having no electroconductive layer thereon, and

wherein a material forming the electroconductive layer is diffused to a part of the layer [primarily composed of] containing aluminum oxide provided between the electroconductive layer and the bottom of the pores above the electroconductive layer.

39. (Amended) A method for manufacturing a structure having pores according to claim 36, wherein the electroconductive layer is an electroconductive film formed on the surface of the substrate, and the film [primarily composed of] containing aluminum is formed so that the thickness thereof is not less than two times the thickness of the electroconductive layer.

40. (Amended) A method for manufacturing a structure having pores according to claim 36, wherein the electroconductive layer is an electroconductive film formed on the surface of the substrate, and the film [primarily composed of] containing aluminum is formed so that the thickness thereof is not less than five times the thickness of the electroconductive layer.

41. (Amended) A method for manufacturing a structure having pores according to claim 36, wherein the electroconductive layer is an electroconductive film formed on the surface of the substrate, and the film [primarily composed of] containing aluminum is formed so that the thickness thereof is not less than ten times the thickness of the electroconductive layer.

43. (Amended) A method for manufacturing a structure having pores according to claim 36, further comprising a step, prior to the anodizing step, of forming a recess on a surface of the film [primarily composed of] containing aluminum disposed so

as to cover the electroconductive layer and the surface of the substrate having no electroconductive layer thereon.

46. (Amended) A structure having pores comprising:

a substrate;

an electroconductive layer formed on a surface of the substrate, wherein the electroconductive layer is patterned;

a layer [primarily composed of] containing aluminum oxide covering the electroconductive layer and a surface of the substrate where no electroconductive layer is formed; and

a plurality of pores formed in the layer [primarily composed of] containing aluminum oxide,

wherein the plurality of pores are disposed above the electroconductive layer and the surface of the substrate where no electroconductive layer is formed, and

wherein an electroconductive path is provided between the electroconductive layer and the bottom of the pores disposed above the electroconductive layer.